That which is claimed:

- 1. A method of using a femoral head resurfacing component, comprising:
- (a) implanting said femoral head resurfacing component on the femoral neck of the patient during a first surgery to be matched with the natural acetabulum of the patient; and
- (b) leaving said femoral head resurfacing component in said body of the patient during a second surgery in which an acetabular component to be matched with the femoral head resurfacing component is implanted in the patient.
- 2. The method according to claim 1, wherein the femoral head is jumbo.
- 3. The method according to claim 1, wherein the femoral component is metallic or ceramic.
- 4. The method according to claim 1, wherein the acetabular component is metallic or ceramic.
- 5. The method according to claim 1, including the step of removing said femoral head resurfacing component and replacing it with a primary hip stem while leaving said acetabular component in said body.
- 6. The method according to claim 1, wherein the acetabular component is linerless.

- 7. A method of performing hip arthroplasty over the life of a patient, comprising using an acetabular component that is capable of being used as both a primary and then the revision acetabular component.
- 8. The method of claim 7, wherein said acetabular component is also capable of being used with a femoral head resurfacing component.
- 9. A method of performing hip arthroplasty over the life of a patient, comprising using the same acetabular component as both the patient's primary and then revision acetabular component.
- 10. The method according to claim 9, wherein said method further includes using said same acetabular component during the patient's femoral head resurfacing prior to said primary hip.
- 11. A method of performing hip arthroplasty over the life of a patient, comprising:
- (a) implanting a femoral resurfacing component in the patient during a first surgery to be matched with the patient's natural acetabulum;
- (b) implanting an acetabular component to be matched with said femoral resurfacing component during a second surgery;
- (c) replacing said femoral resurfacing component with a primary stem component having a femoral ball during a third surgery without replacing said

acetabular component.

- 12. The method according to claim 11, further comprising replacing said primary stem with a revision stem and a new femoral ball during a fourth surgery without replacing said acetabular component.
- 13. The method according to claim 11, further comprising providing said acetabular component with predetermined surface characteristics.
- 14. The method according to claim 13, wherein said step of providing said acetabular component with predetermined surface characteristics further comprises providing said acetabular component with highly toleranced spherocity and smoothness.
- 15. A method of using a hip stem in a patient in which an acetabular implant has been implanted on a prior occasion, including the step of implanting said hip stem without replacing said acetabular implant.